AMENDMENTS TO THE SPECIFICATION

Please amend the specification, by inserting the following language at page 19, after line 21:

The file of this patent contains at least one drawing executed in color. Copies of this patent with color drawings will be provided by the Patent and Trademark Office upon request and payment of necessary fee.

Please replace the paragraph beginning on Page 30, Line 20, and continuing onto Page 31 through Line 18, with the following paragraph rewritten in amendment format:

Following this, thus obtained interaction results are analyzed by PLS analysis (STEP 5) and data is visualized (STEP 6), which is similar to CoMFA and CoMSIA. CoMFA and the like which are conventional 3D ~~GSAR~~ QSAR approaches require handling the values of potentials calculated at as many as hundreds through thousands (depending upon the sizes of molecules) lattice points as structure descriptors (explanatory variables) for the respective molecules, and to this end, the PLS method, a type of regression analysis, is used. According to the PLS method, a value called a "component" correlated with an object variable (such as a pharmacological activity value) is extracted from among a number of descriptors, and a regression equation is formed. The "component" is very similar in nature to a principal component which is computed in principal component analysis, and where plural components are extracted, they are orthogonal to each other. Due to this, it is possible to frame an activity prediction formula from data containing a very large number of variables, e.g., CoMFA data. The number of PLS components is

determined by the reliability evaluation method called "Leave-one-out" method, and with the number of components necessary to form the most reliable activity prediction formula, an activity prediction formula is made.

Please replace the paragraph beginning on Page 59, Line 14, and continuing onto Page 60 through Line 13, with the following paragraph rewritten in amendment format:

Since HASL parameters are not merely hydrophobic parameters but also parameters containing the electron density, while both r^2 and q^2 are higher than in CoMSIA, different drawings are obtained (Fig. 30). That is, when an attenuation function for SEAL is used (5-E), regions where positive HASL parameters will enhance appear the activity around the 3-position and the 17-position side chains, while activity-weakening portions appear at the C-ring side chains. Relatively speaking, it is said that positive HASL parameters contain many atoms which are negatively charged and exhibit hydrophobic interactions with each other and that negative parameters contain many atoms which are ~~negatively~~ positively charged and exhibit hydrophobic interactions. It then follows that it is possible to enhance the activity by negatively charged atoms exhibiting hydrophobic interactions around the 3-position and the 17-position side chains. However, this result is of the opposite trend to the earlier reports, CoMSIA, etc. This is presumably because HASL parameters are not indicative of simple hydrophobic or electrostatic interactions. Noting this, a review of how strongly HASL parameters reflect which physiochemical parameters in the method according to the present invention will hopefully expand the range of applications of the method according to the present invention.

Please replace the paragraph beginning on Page 60, Line 19, and continuing onto Page 61 through Line 11, with the following paragraph rewritten in amendment format:

Study of the application of each attenuation function in the method according to the present invention has not shown any great difference between steric interactions and electrostatic interactions due to a difference of attenuation functions. Use of the SEAL-type Gaussian function ~~SEAL-type Gaussian function (J)~~ indicator valuables (K) produced the highest r^2 and q^2, and use of the Fauchère formula (H) yielded the next favorable result. Comparison of regions contributing to the activity shows that while a region where the activity will be enhanced sterically appears around the 17-position methyl group with CoMSIA, (G), (H) and (I), this region does not appear when the SEAL-type Gaussian function (J) is used. Since a contour map does not appear in this region with CoMFA, it may be that this region does not contribute greatly to onset of the activity. With this method as well, an activity-weakening region appears around the 3-position of the A-ring and an activity-enhancing region appears around a steroid side chain. Table 4 shows the result.

Please replace the paragraph beginning on Page 62, Line 6, and continuing onto Page 63 through Line 4, with the following paragraph rewritten in amendment format:

Approximately the same results were obtained on the electrostatic interactions between all methods. Comparison regarding the electrostatic effect around the 3-position of the A-ring revealed that while regions where positive charges would enhance the activity appeared when CoMSIA was used, regions where negative charges would enhance the activity appeared around regions where positive charges

would enhance the activity when the attenuation functions (G) through (K) were used. This suggests that since the spaces between the represented points or lattice points are smaller in the present invention as compared with CoMSIA, finer 3D QSAR analysis is possible. In addition, a difference from the steric interactions, r^2 was the best when ~~Gaussian function~~ indicator valuables (K) was used, whereas q^2 was the best when the Fauchère formula (H) was used. Table 5 shows the result. The items in the chart are the same as those in Table 2.